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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/881,698

06/18/2001

Yukio Tozawa

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06/08/2004

RADER FISHMAN & GRAUER PLLC

LION BUILDING

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WASHINGTON, DC 20036

EXAMINER

MAKI, STEVEN D

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/881,698

Applicant(s)

TOZAWA ET AL.

Examiner

Steven D. Maki

Art Unit

1733

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 24 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** (check either a) or b)

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☒ Applicant's reply has overcome the following rejection(s): the 103 rejection of claim 4 (see advisory action attachment).

4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see advisory action attachment.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: 4

Claim(s) rejected: 1, 3, 5 and 6

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

Advisory Action Attachment

allowable subject matter

**Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**As an alternative to writing claim 4 in independent form, it is suggested to (1) incorporate the subject matter of claim 4 into claim 1 and (2) change "any one of claims 1 and 3" in each of claims 5 and 6 to --claim 1--. The allowable claims would be 1, 5 and 6.**

The prior art of record (including the admitted prior art, Kukimoto et al, Montagne, Japan '609 and Japan '709) fails to disclose, teach or suggest a pneumatic tire having main grooves having a groove width narrowed during inflation and inclined groove walls so that the groove width of the main groove becomes wider toward a groove bottom and a protrusion having slanted sidewalls such that respective ones of the pair of protrusion slanted sidewalls and the both groove walls are oriented parallel to each other and "a height difference between said protrusion and said tread surface is set in a range from 0 to 2 mm, the height of said protrusion is at least 12 mm and a ratio of the height of said protrusion to a groove depth of the main groove is set at 0.8 or higher" and "said protrusion is divided in the tire width direction by a slit formed into the flat top surface towards the groove bottom and extending circumferentially thereabout to form a first divided protrusion section and a second divided protrusion section in facial contact with the first divided protrusion section at the slit". It is emphasized that (1) Kukimoto et al

shows respective ones of protrusion sidewalls and groove walls inclining in the same direction but does not show a circumferential slit in the protrusion, (2) Japan '709 shows a circumferential slit in a protrusion but does not show respective ones of the protrusion sidewalls and the both groove walls being oriented parallel and (3) neither Kukimoto et al nor Japan '709 recite main grooves having groove widths which narrow during inflation.

remarks

With respect to claims 1, 3, 5 and 6, applicant argues that the applied prior art does not teach a height of the protrusion being at least 12 mm and a ratio of the height of the protrusion to a groove depth of the main groove being 0.8 or higher. This argument is not persuasive. Applicant acknowledges that Kukimoto et al discloses a distance (stepped depth) of 2 mm between the tread surface and the top of the protrusion. Examiner adds that (1) Kukimoto suggests using a stepped depth less than 2 mm since Kukimoto et al teaches that the protrusion must contact the ground (col. 4 lines 47-48) and (2) Kukimoto et al describes a reference (comparative) example where the stepped depth is 0 mm (Table 2). In order for the limitations of "at least 12 mm" and "0.8 or higher" to be satisfied, the groove depth must be at least 12 mm if the stepped depth is 0 mm or must be at least 15 mm if the stepped depth is 2 mm. Although the admitted prior art is silent as to the groove depth, Kukimoto et al suggests a groove depth of 12 mm or higher or 15 mm or higher. The evidence supporting this conclusion comes from the teachings in Kukimoto et al and includes (1) Kukimoto et al's teaching that the grooves are for the tread of a heavy duty pneumatic tire, (2) Kukimoto

et al's explicit teaching of an example stepped depth of 2 mm, (3) Kukimoto et al's teaching to use a groove depth substantially deeper than the stepped depth as can be seen from figures 22b, 23b, and (4) Kukimoto et al's explicit teaching of a tread gauge of 20 mm (col. 5 lines 29-30). This conclusion regarding groove depth is consistent with Kukimoto et al's Example 1 which use a width w of 10 mm for the figure 1 embodiment in which the distance defining the groove depth is illustrated as being greater than the distance defining the protrusion width w.

At Page 8 of the response, applicant asserts "results and advantages" of the invention and refers to pages 2, 7 and 8 of the specification in which the specification describes controlling uneven wear. First: No unexpected results over the applied prior art have been shown. Second: The result of controlling uneven wear is the expected result since Kukimoto et al teaches "uneven wear can easily and appropriately be prevented during the entire tire use life by the action of the uneven wear-sacrificed portions [the protrusions] locally formed on the tread without affecting any adverse affects upon tire performance".

Applicant's argument regarding Overman is not persuasive for the reason given in the last office action.

The specification objection has been withdrawn in view of the amendment to the specification in the after final amendment 5-24-04.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
June 3, 2004

  
STEVEN D. MAKI  
PRIMARY EXAMINER  
~~GROUP 1300~~  
6-3-04  
AV 1733